

REMARKS

The Office action of April 2, 2009, has been carefully considered.

Objection has been raised to the drawings on the basis of claimed elements which are not shown in the drawings. The particular claimed elements are found in Claims 7 and 16, Claims 12 and 19, and Claim 17. The subject matter of these claims has been canceled from the application.

Objection has also been raised to the drawings on the basis that reference numeral 64 is not found in the drawings. The specification has been amended at page 8, line 18 to remove this reference numeral.

Objection has been raised to the specification based upon the improper use of symbols on page 5, and this improper use has now been corrected.

Objection has also been raised to the specification based upon a lack of antecedent basis for the subject matter found in Claims 7 and 17, and these claims have now been canceled from the application.

Various objections have been raised to Claims 1, 4-13 and 22, and these objections have now been obviated in the claims as amended.

Claims 1-23 have been rejected under 35 USC 112, second paragraph, and these claims have now been entirely canceled and rewritten as a new set of Claims 24-34, in proper form for U.S. practice.

Withdrawal of this rejection is requested.

Claims 1-2, 6, 8, 10 and 13-15 have been rejected under 35 USC 102(b) as anticipated by Chan-Wong et al.

As noted above, a new set of Claims 24-34 has been submitted for examination. New Claim 24 represents the subject matter of original Claims 14, 15 and 21, Claims 25 and

26 represent the subject matter of original Claims 22 and 23, respectively, and Claim 27 is an apparatus claim directed specifically to the converter, and is supported by the specification at page 8, fourth paragraph, as well as original Claim 21. Claims 28 and 29 correspond to subject matter found in original Claims 22 and 23.

Claim 30 is a method claim which incorporates the recitations of apparatus Claim 24, and is supported by original Claims 1, 14, 21 and 25. Method Claims 31-34 correspond to original Claims 2-5, respectively.

According to the claimed invention, the ultrasound converter comprises a plurality of piezo-ceramic disks which can be placed in oscillation and which are disposed between a pin and a nut and which are tensioned between the pin and nut by a first bolt element 70. A piezo-ceramic sensor captures the amplitude of an associated component part which is placed in oscillation.

Moreover, the first bolt element 70 comprises a tapped blind hole 74 starting at an end face of the converter running from the nut side, with an internal thread into which a second bolt is screwed, by which the piezo-ceramic sensor is tensioned in relation to the first bolt element.

Such an apparatus is not disclosed or suggested in the Chan-Wong et al patent, and indeed original Claim 21 was not rejected over Chan-Wong et al.

Chan-Wong et al relates to a piezoelectric sensor for measuring bonding parameters. According to this reference, a sensor is arranged between an ultrasonic transducer 4 and a concentrator 3 in order to determine welding parameters. The reference does not disclose or suggest integrating a piezo-ceramic sensor into a converter of an ultrasound welding device utilizing bolt elements fixing the sensor and tensioning the piezo-ceramic disk generating the oscillation.

The result is a simple design characterized by a robust construction.

New method Claim 30 utilizes this converter according to apparatus Claims 24 and 28, which is not disclosed or suggested by Chan-Wong et al.

Withdrawal of this rejection is requested.

The specification has been amended to utilize proper subject matter headings for U.S. practice. In addition, new Claim 32 recites "sensor signals" as opposed to "control signals" in the original Claim 3, supported by the disclosure of Figure 9 of the specification as well as the last two paragraphs on page 9 of the application.

In view of the foregoing amendments and remarks, Applicant submits that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,



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